could be made still more continuous, and there are also other skulls with these processes double-pointed, and so on, which may be mentioned as proving the variation of this bone; but I think this is enough.

I do not wish to add any disparaging remarks; but I must say that it seems really better not to burden the alrealy copious nomenclature with new names of subspecies established

on such triffing characteristics.

Upsala, May 3, 1900.

PROCEEDINGS OF LEARNED SOCIETIES.

GEOLOGICAL SOCIETY.

December 6th, 1899.—W. Whitaker, B.A., F.R.S., President, in the Chair.

The following communication was read:-

'On the Occurrence in British Carboniferous Rocks of the Devonian Genus *Paleoneilo*, with a Description of a New Species.' By Dr. Wheelton Hind, B.S., F.R.C.S., F.G.S.

The family Nuculidæ is represented in Carboniferous rocks by the genera Nucula, Nuculana, and Ctenodonta, and to these must now be added Paleoneilo, which the author describes from two fine specimens in the Museum of Practical Geology, from Carboniferous Shale (Yoredale Shale) south of Hammerton Hall, Slaidburn, Yorkshire. It is remarkable that a genus so well developed in Devonian times should be found at the top of the Carboniferous Limestone Series, but not in intermediate beds. Hall's diagnosis of the genus is given, with additional remarks, and a new species is described and contrasted with Ctenodonta (Palæoneilo) lirata, Phil., from the Devonian of Baggy.

January 24th, 1900.—W. Whitaker, B.A., F.R.S., President, in the Chair.

The following communications were read:-

1. 'Fossils in the University Museum, Oxford: II.—On Two New Genera and Species of Crinoidea.' By W. J. Sollas, M.A., D.Sc., I.I..D., F.R.S., V.P.G.S., Professor of Geology in the University of Oxford.

The first genus and species are founded on two calyces in the

University Collection and three in the British Museum; all the specimens come from the Carboniferons Limestone. The arms and stem are at present unknown. The genus in general character and structure recalls *Platycrinus*, but the incorporation of the costal and distichal plates in the calyx affords a very obvious distinction. The analysis of the calyx, however, suggests the Melocrinidæ, from the members of which it is chiefly distinguished by the comparatively small size of the costal and distichal plates. The new genus is a truly annectant form uniting the Melocrinidæ and the Platycrinidæ, and may be indifferently associated with either.

The second genus and species are founded on a specimen in the Grindrod Collection, obtained probably from the Silurian rocks, but from a locality not known, possibly Dudley. In general appearance it resembles an elongated form of *Pisocrinus*, particularly in its calyx, but the arms are those of a Heterocrinid. This conjunction of characters, though rendering necessary a revision of the definition of the Pisocrinidæ, cannot be regarded as bringing this family appreciably nearer to the Heterocrinidæ, which are fistulate, while

the Pisocrinidæ, so far as known, are not.

2. 'Fossils in the University Museum, Oxford: III.—A New Worm-track from the Slates of Bray Head, Ireland, with Observations on the genus *Oldhamia*.' By W. J. Sollus, M.A., D.Sc., LL.D., F.R.S., V.P.G.S., Professor of Geology in the University of Oxford.

The curious markings known as Oldhamia have not been hitherto recorded from other than the Lower Palæozoic rocks, although they have a wide distribution in space, being found in Ireland, in the Ardennes, in Brabant, in America, and possibly in Norway. While the organic nature of Oldhamia was scarcely a matter of doubt in the minds of the earlier writers, there existed a great diversity of opinion as to its place in the organic world, and it was placed by different observers among polyzoa, hydrozoa, and plants, respectively. The microscopical observations made by the Author prove that Oldhamia is not the remains of an organism, but merely a marking in the rock, though one which might be, nevertheless, of organic origin. Certain markings formed in the mud at Portishead. by the feeding-habits of a small burrowing crustacean, bear a considerable resemblance to specimens of Oldhamia; but a stronger resemblance to the new species described in this paper is found in Nathorst's figures of the impressions made by one of the two recent worms Glycera alba or Gonidia magnituda. Prof. Joly's observation that markings of Oldhamia antiqua always occur in relief, while those of O. radiata are depressions, might suggest that while one set of markings was produced by the animal when feeding, the other was connected with its castings of excrementitious matter. This explanation is open, however, to several objections, and the Author is inclined to believe that these species of Oldhamia are the traces

of some kind of siphonaccous alga: the eavities left by their decay were subsequently filled in by sediment under pressure. If the upper surface of O, antiqua were more resistant than the lower, this might account for its preservation in relief. The microscopical examination of slate containing Oldhamia affords evidence of original and secondary structures which has an important bearing on this question.

MISCELLANEOUS.

Golianthinus (Sphyrorrhina) Wisei. By E. A. Heath, M.D., F.L.S.

SINCE publishing a description of the above, from East Africa (ante. p. 397), I have come across a description and figure of a beetle described by Dr. Kraatz from the other side of the continent. and named by him Fornasinius Hauseri. This is the nearest ally to my species in form, structure, and markings, from which, however, G. Wisei differs by having three sharp outer spines on the front tibiæ; the terminal spines in Dr. Kraatz's specimen are very blunt, semitruneate; the first segment of the front tarsus is nearly twice as long as in my species. The markings on the thorax also are quite different; beside the three centre lines, which are somewhat similar in both species, Dr. Kraatz's species has a lateral line reaching from the anterior border to the middle of the thorax, and a line on both outer borders of the thorax from the base of the head, where it joins the last-mentioned short lines, to the shoulder of the elytra; my species is quite devoid of these short lines and the marginal lines; in mine the horn is much thicker than in Dr. Kraatz's species.

I have used the older name of Golianthinus as a generic name, as

it more clearly indicates the group to which it belongs.

Two mistakes occurred in my description: for *Golianthus* read *Golianthinus*, and in the last line of the description instead of "femora" read "tibiæ."

May 14th, 1900.

On the Skeleton of the Snout and Os carunculæ of the Mammary Fatus of Monotremes. By Prof. J. T. Wilson, M.B., Ch.M.

For the research three specimens were utilized: one was the feetal *Ornithorhynchus*, whose external characters were described by the writer in a previous paper before the Society; another was a